

**STATE ADVISORY COUNCIL ON
SCIENCE AND TECHNOLOGY MEETING
Monday, March 14, 2005
2:00 – 4:30 pm
State Capitol – House of Reps., Rm #125 (West Bldg)**

Minutes

Members Present:

Mike Brehm, Chair
Gregg Critchfield, Myriad Genetics
Gary Hooper, BYU
Troy Takach, Design Jug
Bill Barnett, Hyclone Labs
Ashok Khandkar, Amedica Corp.
Ray Gesteland, University of Utah
Brent Miller, Utah State University
Tami Goetz, SLCC

Guests Present:

Ken O'Brien, State of Utah
Dan Hannon, CPPA
Martin Frey, DBED
Laura Bohn, Governor's Office
Rich Nelson, UITA
Gerry Carpenter, UITA
Mike Keene, DBED
Rich Kendall, State Board of Education
Lloyd Alexander, Elbow Partners
Annette Babisz, DBED
Trent Kemp, Utah State University
Trish Geode, University of Utah
Ladd Christensen, DBED
Quinn Stirland, DBED
Janice Houston, CPPA
Rick Allis, State of Utah
Sheryl Hohle, Bio Catalogia
Sharon Cox, DBED

I. Welcome and Approval of Minutes

Chairman Brehm called the meeting to order at 2:05 p.m. and asked for introductions of those in attendance including special guests. He acknowledged newest members Ashok and Tami and asked them for some background of what they have been doing. He also acknowledged Ray, Grant, and Greg who along with himself make up the Executive Committee. Chairman Brehm said he had also extended an invitation to a group he refers as Friends of SAC.

The special guests and speakers, Rich Nelson of UITA and Janice Houston of Houston Consultants were introduced.

Action: Minutes of November 23, 2004 were unanimously approved.

Chairman Brehm mentioned the Council normally would have met earlier this year on a regularly established basis, but with the new administration and changes in the Department that oversees the Council, the executive committee elected to first meet with Co-Director Martin Frey to get a sense of expectations of the Department and the Governor's Office. As a result of that meeting last month, the Council has been challenged with: **1)** the task of forwarding nominations for a new State Science Advisor, as Mike Keene is now involved with other duties, and **2)** to act as a sounding board for evaluating certain aspects of the Governor's economic initiatives.

II. Presentations – Statewide Economic Development Initiatives

- a. Richard Nelson, President & CEO of Utah Information Technology Association (UITA), began by giving a background of the organization, which was started as an independent group in 1991 under Governor Bangert. He reported on how the organization became

involved with Clusters, stating that this effort needs to be based on both university and industry strengths, and long-term funding depends on demonstrated success in 2005. There needs to be a long-term plan, and some progress in moving the initiative forward in the next 8 months. The IT and Life Sciences Industries are ready to fully support the initiative. An Economic Development Initiative Clusters Task Force should be able to identify 4–6 clusters that have the best potential for success by April 8. The suggested Task Force members include: Lane Beattie, Richard Nelson, Jack Brittain, Dinesh Patel, Martin Frey, Jack Sunderlage, Brent Miller, Nicole Toomey-Davis, Brian Moss, and Will West.

It is necessary to have government – Chris Roybal and Martin Frey – absolutely aligned with the two research universities and industry. This opportunity is too important to everyone to miss. Chairman Brehm feels it is very important to the process to bring the state, the governor's office, the policy makers, the research universities and the private sector together into a common plan.

- b. Martin Frey, Co-Director, State Division of Business & Economic Development said in his short time with the department he has learned the issues and needs. Right now Utah is challenged in two ways – **1)** we are not quite aligned around a single strategy, and **2)** we are not thinking big enough. He went through key things economic development is doing to focus on Cluster development. The Governor has asked him to take the lead on building a coalition to create a single strategy for building clusters. He wants to build on what has already been done with studies and initiatives; but feels there are some unrepresented interests that should be included. He also outlined an approach to select targeted industries and build an alignment between universities, industry and government incentives. Market transitions and trends should be included. He suggested an aggressive timeline for the next six months, to build on the momentum established with the legislature, and go back to the next session with a clear plan and record of success in establishing clusters and the developing a strategy. He welcomes input from the Council.

Chairman Brehm added that to keep pace with the timeline schedule, the Council should dedicate portions of each of the next few meetings to this process.

Martin volunteered to take the lead in calling additional meetings to get started and organized, unless the Council feels someone else is better suited. Richard Nelson seconded Martin's suggestion and feels he would be the obvious person to move things forward. As the timeline is urgent, he feels the Council really needs to move ahead even more aggressively than outlined. Martin feels the Council has already done a good inventory of strengths and where to build at the university level. Clusters are a true partnership between industry and the universities. As the process matures over time, it will actually move from a university centered research approach to industry itself. There needs to be a more specific focus and move as quickly as possible with the Science Advisory Council being an important part of the initiative. Key players should be brought together quickly and meet together frequently without involving the whole Council.

In an effort to move quickly there is a meeting scheduled April 4th to get a consensus of the cluster selection process. At today's meeting there should be some meeting dates selected to lay out a specific plan. It was felt there should be a task group formed to include a representative from UITA, ULISA, the Chamber, the Governor's office, and the research universities, etc. The Salt Lake Chamber also needs to be represented. The group should meet as often as perhaps once a week and report to the Council as appropriate or necessary. It was suggested that one person from the Council,

independent of the universities, be placed on the committee in the role of sub-committee chair. It was also felt the effort should be driven from the Governor's office.

Action: Troy Takach volunteered to be the SAC representative on the Cluster Development Task Force.

The Task Force would primarily focus on better clusters in science and research and development that would have promise for future economic development. The issue of whether tourism, or health and fitness are clusters would be an economic development issue for the State. Martin feels it would be a disservice to some of our existing companies if we do not build on existing strengths in areas outside of the universities in the private sector. Once clusters are defined and strategies are developed it should be decided who the best scientists and companies are to focus on and what new incentives are needed to recruit crucial key corporations to the State.

- c. Janice Houston, Salt Lake Chamber, co-author of the "Chamber White Paper" distributed an Executive Summary and an article from the "Christian Science Monitor" in which she highlighted important parts she wants the Council to keep in mind as they determine clusters. She also handed out a list of about 25 "Hi-Tech Clusters" and 60+ "Knowledge-based Industries" which she felt would be useful as the Council looks at Clusters. As she studied data from other states, she feels the state with the most potential for success is Maryland. She strongly urged everyone on the Council to look at Maryland's report. She pointed out a center tab marking a 20-page chapter on "State Investments in Research and Technology," (about page 75) which shows a sample of the types of things 20 other states are doing along these lines. When the two universities did a case study they featured Arizona with several-pages of coverage, where other states had only a few paragraphs. Janice used this as an appendix to her "White Paper." On locals level the city of Philadelphia has started a large recruitment effort, and is offering economic incentives to individuals, such as low-cost mortgages and subsidized loans.
- d. Ray Gesteland and Brent Miller made their presentation on University Research stating the presence of a major research university is a basic infrastructure component of a creative economy. To clear up a misunderstanding, they explained what when universities talk of hiring 25 Research Clusters – they mean they want to hire 25 teams of senior scientist and affiliated faculty, which they call a cluster; it's not the same as an industry cluster concept. To attract senior people needed for these clusters they try to identify those who have the greatest potential to bring rapid economic development and to create spin-off companies. Vice President Miller distributed a paper entitled "USU Research and Economic Development Focus Areas" which lists the areas USU wants to focus on, and "Criteria for Selection of Senior Faculty for Economic Development Initiatives." A lot of areas they do research in and where they may be outstanding were not included, but areas where there is a more certain path to intellectual properties and spin-off companies were chosen. The universities' major strengths fall into two general areas – biotechnology and information technology. They mentioned they are in negotiations with one group involved in a biotechnology project to bring them to Utah.

Martin commented he understands the research agenda has been narrowed to areas that have two criteria: 1) where there is a real strength, and 2) a best guess that there is a potential for economic development. We need a single strategy, but also build on previous work. This is an evolving work, and next year's clusters may evolve differently. Martin wants one single integrated plan where community colleges help develop technicians that can go on to a higher level of becoming engineers; where scholarships at the universities are used to get top students to go into these particular areas; and grants are focused. One effort underway is to try to cultivate math and science interests among

students much younger than college age, and perhaps make requirements for students to take more than one science course between 9th grade and graduation. The Governor will host a meeting on March 28th to discuss college readiness. Another effort is to create six early college high schools in the state, with math, science, and engineering as a focal point. It is hoped there will be 700 – 900 graduating students a year who will know their life interest is in engineering. Another effort is providing public school teachers with scholarships to be trained in math and science – \$12 to \$15 million has already gone to public school teachers. It was also mentioned the average student accepted at Stanford has an average of 32 college credits. It was suggested the Council could perhaps prepare a white Paper or timeline to address these needs.

III. SAC Business:

1. **Executive Committee Meeting discussion** was covered by Martin Frey.
2. **Recommendations to DBED** refers to the Council being asked to participate and extend recommendations in one form or another.
3. **State Science Advisor Search**: the last page of Martin's handout includes the position description anticipated by DBED and the Governor's office. The Executive Committee will filter names and potentially conduct interviews. Chairman Brehm reported about six names were forwarded to him and others on the Executive Committee for consideration. He suggested the Committee may want to meet following this meeting to decide what to do with the names. He hopes to collect a list of candidates they can refer to the Governor's staff for consideration. The Committee is the primary source, but is not the only route to identify candidates; others in state government may do that independently. He asked if there are other suggestions that haven't been submitted, he would appreciate receiving them in the next few days. He feels the Executive Committee will probably look more seriously at 3 or 4 of the 6 names submitted. It was suggested perhaps a broader net should be cast. He wants to make sure that the Committee offers the very best candidates. Chairman Brehm questioned if there should be a general public announcement so everyone is aware and has an opportunity to nominate someone. He will send out one more appeal for candidates – possibly by a general press release, or an informal announcement to other Advisory Councils. The Governor is anxious for a report, but needs the right person.
4. **Governor's Medal Planning**: Gregg Critchfield reported it was discussed in previous meetings the process should be completed by September. Assuming we continue on that timeframe he proposed a tentative timeline: to announce sometime this spring that they are ready to accept nominations for the Governor's Medal, and close the nominations sometime in June, spend the months of July and August processing the nominations and have them ready to be announced in September at the dinner with the Governor. In order to complete the process he needs three or four people to volunteer to help. It was decided that the Vice Chairman be the Chair of the Selection Committee. It would be good to get one of the new members involved to learn the process for when the new Vice Chair takes over. Chairman Brehm authorized Gregg to work with the Committee to keep the timeline. The Governor's office is waiting to be notified of the date for the event in September.

Action: Sharon was encouraged to work to schedule that date soon. Sharon said Heather historically sent an email through the IT. Chairman Brehm said if Sharon could get a list soon, it could also be used for the search announcement. Sharon was asked to look into that and let Chairman Brehm know how current and functional the IT managed list is.

The university representatives on the Council expressed that September is the worst time of the year to talk to people in academic groups. It was pointed out the previous Governor established the date, so there is a possibility of revisiting the decision. The problem with restoring it to its former spring cycle now is that an entire year would be lost. Since we are in flux with staff and schedules, Chairman Brehm is inclined to stay with the fall plan, and revisit the issue at a later time.

5. **Future Agenda Items:** Chairman Brehm sees the Council's focus for the foreseeable meetings as being: **1)** the Cluster issue, **2)** the Science Advisor, and **3)** the Governor's Medal.
6. **Meeting Schedule:** The next meeting is scheduled for April 18th, at the State Capitol, House of Representatives, Room #125 (in the West Building), from 2:00 –4:00 p.m.; with the following meeting on May 16th. It was decided to set a regular cycle to meet the third Monday of every month at the same time and place.

Action: Chairman Brehm asked Sharon to update the website to indicate the dates for April and May meetings, and add a general announcement that the plan is to meet the third Monday of each month.

IV. Adjourn: The meeting was adjourned at 4:20 p.m.